

Compositional processes of *Xylafrique*: A Contemporary Art Composition based on the *Dagaaba gyil* of Ghana.

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Abstract

In recent years, theorist and creative ethnomusicologists have been stressing on the use of elements in indigenous music to achieve syncretism in musical compositions. This article examines the compositional processes of Xylafrique, a contemporary art composition based on Dagaaba gyil of Ghana. It delineates traditional elements in relation to conventions of xylophone musical genre of the Dagaaba. It highlights the compositional applications of both Western and African music based on Webster's model of creative thinking, Nketia's syncretic approach theory and the bi-musicality and African Pianism theories of Euba. Xylafrique provides a theoretical platform that aids the study of traditional music that could be adapted for other non-Western music traditions. It exposes selected traditional idioms of Dagaaba gyil genre to the world of composition. The composition adds to the repertoire of art music and therefore envisaged that it will foster creativity in not only students studying composition but art composers who use traditional elements in constructing their imaginative ideas in creating music.

Keywords: *Xylafrique*, *gyil*, Dagaaba, syncretic, bi-musicality, African-pianism

1. Introduction

Xylafrique is an acronym found with the prefix *Xyl*¹, with the suffix, *afrique*². The composition embodies the use of Western twentieth century music techniques with African musical idioms. The Western techniques reinforce African idioms well with the traditional rhythms. The paper provides an insight into the thought processes of creative ethnomusicology by offering a guide showing how twenty-first-century composers can use African musical idioms in their creative works. *Xylafrique* is a creative work with traditional materials of *gyil* (xylophone) ensemble of the Dagaaba people of Ghana adopting Webster's (1996) model of creative thinking in music, Nketia's syncretic approach theory (1983), the bi-musicality and the African Pianism theories of Euba (1992). The music has three movements and this paper presents a panoramic view and an analysis of each of the movements.

2. Theoretical concepts

2.1 Model of creative Thinking

The concepts and theories used to create the music were Webster's (1996) model of creative thinking, Nketia's syncretic approach theory (1983), the bi-musicality and African Pianism theories of Euba (1992).

Webster grouped the model into three major headings: Product Intention, Thinking Process and Creative Thinking. According to the model, composition or improvisation, performance and analysis can be considered at the outset of creative thinking as goals or 'intentions' of the creator (composer). When the intention is established, the creator must rely on a set of skills that allow for the thinking process to occur. The success of this product intention includes not only motivation, formal and informal musical training but also sub-consciousness, imagery, personality and the environment. Furthermore, the centre of the Webster's thinking process indicates movement between divergent and convergent thinking consisting of preparation, incubation, verification and illustration. As a result of that *Xylafrique* was created based on the thinking process expounded and which divergently includes the enabling skills and conditions converged into the final product.

¹ Xylophone

² Translation of "Africa" in French

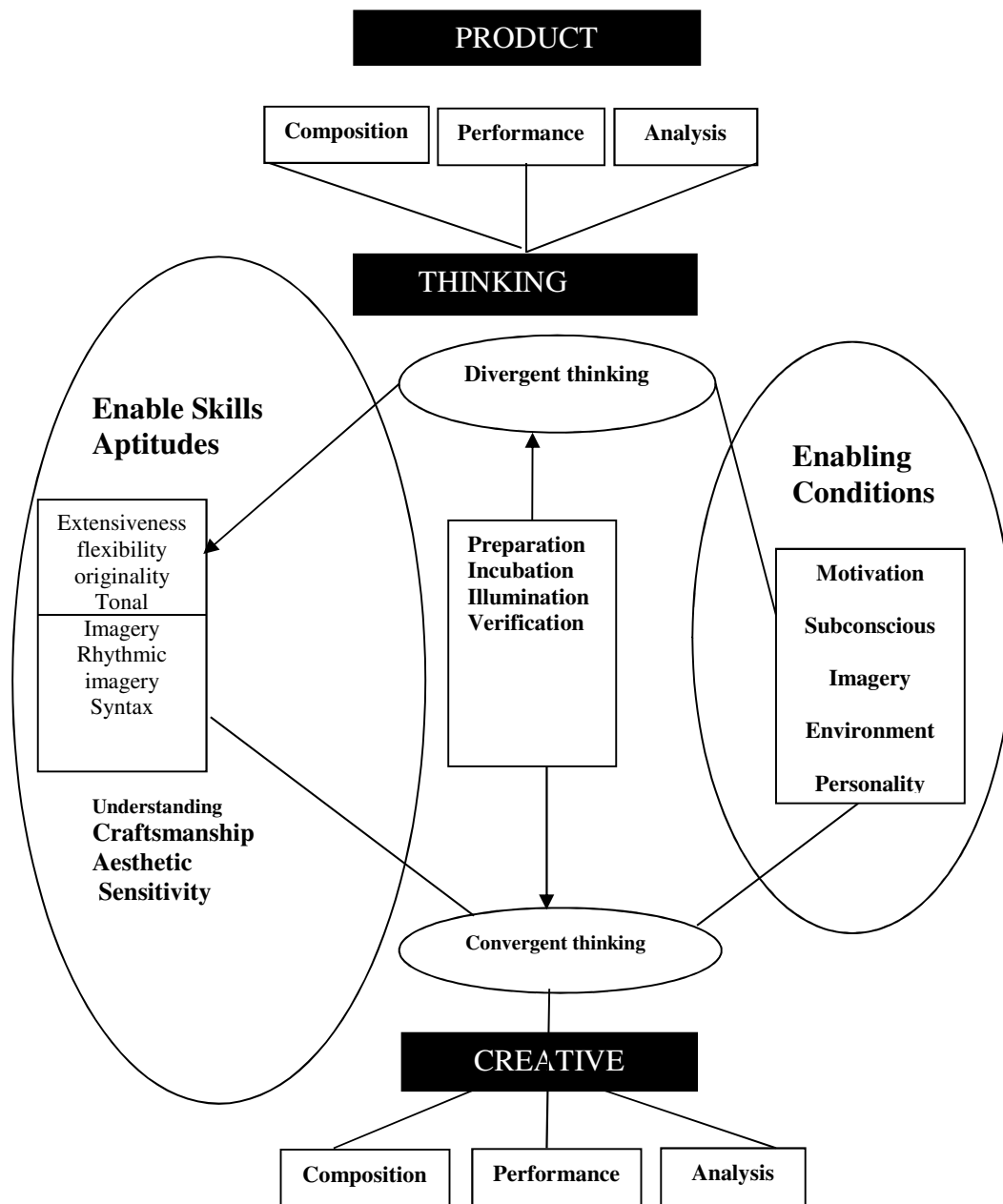


Figure 1: Webster's model of creative thinking in music

2.2 Syncretic approach theory

Nketia's (2007) syncretic approach provides the moulds for creating and developing channels of the communication and musical codes that can be understood by the receptors of music and not just by those who generate them. According to him, it is the adaptation to traditional music or music in oral or partly oral tradition for creative ideas, sources of sound, themes and procedures for expanding one's modes of expression'. He views this concept as appropriate and states:

"Listeners, he says, are usually more apt to respond favorably to music that speaks in the same way in which their native language flows, each having its own peculiar rhythmic flow or feel. It is important drawing from the past when trying to create a new musical idiom. Hence the syncretic approach theory is a concept probably as old as the tradition of composing music for art's sake" (Nketia, 2007).

Fisher (1992) had earlier on indicated this concept when he says:

“When authentic experience is expelled and the cultural vault emptied, what then can be the fate of memory? Divested of experience, what can degraded memory hold? Can memory as a functional component of creativity and intellection continue to be precious, its power heuristic? Art drawing only on experience is by definition a syncretic art. If experience is a precondition to creation of new art and if such creation may be understood to subsume artistic "advancement," "growth," or, at the least, "difference," the process will require significant potentialization from a source beyond the personal resources (experience preserved in memory) of the creator” (Fisher, 1992, p.7).

Scholars such as Chang (2001), Waterman (1952) and Merriam (1955) were specific about the use of syncretism as a conceptual tool for clarifying cultural synthesis as a process. They are of the view that there must be an "outside" source leading to conceptualization, analytical penetration and activation of system, however informal, if there is to be "process" or control in the making of art. These concepts informed the creation of *Xylafrique*.

2.3 Bi-musicality

Davis (1994, p.147) argues that the hybridizing of musical elements of various ethnic origins and the development of new genres and styles occur within secular dance music; music that serves the function of recreation permits certain modification without jeopardizing its social purpose. He suggests that, styles and genres may merge, giving rise to new creations. On the other hand, both European and African derived musical styles and genres may coexist without complete syncretism, each represented by different component genres or subgenres within a musical event, or even by different aspects or sections of individual pieces. *Xylafrique* was created combining both African and Western materials under this concept.

2.4 African Pianism

Writing on how African art music composers can expand their creative resources Akrofi (2002) citing Euba (1989) explains African pianism as the techniques used in the performance of African xylophones, thumb pianos, plucked lutes, drum chimes [...] and the polyrhythmic methods of African instrumental music in general that would form a good basis for an African pianistic style. Further explanation is that the ingredients of thematic repetition, direct borrowings of the thematic material (rhythmical and/or tonal) of African traditional resources, the use of rhythmical and/or tonal motifs embedded in a composition or an artifact makes it truly African.

These idioms may be simple or extended rhythmic motifs or the lyricism of traditional songs and even those of African popular music as the basis of its rhythmic phrases. It is open ended as far as the use of tonal materials is concerned except that it may draw on the modal and cadential characteristics of traditional music. Its harmonic idiom may be tonal, atonal, consonant or dissonant in whole or part, depending on the preferences of the composer, the mood or impressions he wishes to create or how he chooses to reinforce, heighten or soften the jaggedness of successive percussive attacks. In this respect, the African composer does not have to tie himself down to any particular school of writing if his primary aim is to explore the potential of African rhythmic and tonal usages. These concepts: The Webster's model, syncretic method and African pianism theories became the underpinning of *Xylafrique* to blend to communicate in an appropriate musical idiom. The close proximity was instrumental in synthesizing the various parts as in text and melody, rhythm and meter; then texture to bring out the *Dagaaba gyl* idiom in the composition alongside the Western compositional techniques.

3. Methodology

Traditional idioms of the *Dagaaba gyl* were collected and analyzed through melodic, rhythmic and harmonic content. These are conventional methods of analysis that include macro analysis, extensional and intentional analyses. Macro analysis involves transcription of recorded *Dagaaba gyl* folk songs. Details such as musical structure and performance styles in solo-response form were all noted (List, 1964). Extensional Analysis describes the music itself—tempo, timbre, pitch, language, etc. which made it easier for the classification of the *Dagaaba* traditional music, while intentional analysis highlights the qualities that make up the *Gyl* music. This includes melodic and rhythmic patterns of the *Dagaaba* folk songs. These traditional elements were analyzed and used to create *xylafrique*.

4. The Creative Process

4.1 Themes

The process of creating the *Xylafrique* involved establishing the themes and the resources used to compose. The composition, as already stated, consists of three movements with a program line, which is sub-divided into

smaller sections. The themes of each of the movements are distinct melodies normally performed in *gyil* ensembles. The melodies have the titles; *Ate Kyille*¹, *Zung be nyere yee*² and *Yang yang kole*³.

4.2 Instrumentation

Both Western and African Traditional Instruments were combined and used. Western Instruments used were Piano, Piccolo, Flute I & II, Oboe I & II, English Horn, B flat Clarinet I & II, Bass Clarinet, Bassoon I & II, Contra Bassoon, Violin I & II, Viola, Cello and Contra Bass. Traditional indigenous instruments include *Gyil*, *Nukpola*, *Kur Velpele*, and *Cheimε*. These traditional instruments are used in *gyil* ensemble of the Dagaaba people of Ghana.

5.0 Analysis

Xyafrique has a story line and analyzed based on the themes, orchestration, metre and rhythm, tonality, melodic contour range and intervals and harmony.

5.1 Main themes

Excerpt 1: Theme of the first movement

Gyil



A - te kyi - lle a - te kyi - lle y'a - ga - ga - ga

A - te kyi - lle a - te kyi - lle y'a ga ha ha ha

Excerpt 2: Theme of the second movement

Gyil



Zung be - n - ye - re yee e - kyε nyuure pa - taa - si N'a - ma

Zung be - n - ye - re yee e - kyε yee pa - taa si

Excerpt 3: Theme of the third movement

Gyil



Yang yang ko - lee ze - lee yang

yang ko-lee ze-lee yang yang ko-lee Ze-le yang yang puo wa pe li o - nakoo na

¹ Let us rejoice

² The blind drunkard

³ A beggar is free to beg

5.2 The Story line

In the first movement, the tune applies to fit a real life situation. The ups and downs of a person, sudden events that make life move from bad to worse. Depicted in the work, the mood begins happily and blissfully from the start, then uncertainty sets in at the middle making life unbearable– hopefulness for the family however, just as things were out of hand, God, in his own way, brings back happiness. The second movement is based on the *gyil* melody titled *Zun' be nyere yee, ekye nyuur pataasi* translated as “a blind man, and yet drinks akpeteshi¹. Two friends including the blind man go on drinking spree and get intoxicated. The music depicts their return from the drinking bar to their homes. The third movement of based on the song *Yang yang kolee* is a philosophical saying among the Dagaaba. It translates as “a beggar is free to beg but it depends on the readiness of the giver”. Used in *xylafrique*, Twentieth Century techniques were employed to depict the scenery of begging.

The first movement has three sections. A, B and C but took the Rondo form – ABACA however, the second movement was based on through composed, made up of six sections (ABCDEF). The violin depicts the blind man whereas the piano represents his friend. With the third movement theme-and-variation was used. It contains five variations after the theme is announced by the violin. Following the variations is a coda predominated with arpeggios, and then ascending and descending pentatonic scalar techniques within measures 66-75 of the third movement.

5.3 Orchestration

The 1st movement uses violin, cello, piano, *gyil* and *velkpelle*. The piano boosts the Dagaaba melodic instrument and they relate well in call-and-response passages. The violin and cello, the Western string instruments, reinforce *gyil* idioms well with the traditional rhythms. The piano at this time depicts *kuor* traditional drum in a percussive manner. The second movement is written for a solo violin and piano. The piano introduces the piece with a melody in D anhemitonic pentatonic (measures 1- 5) as shown below.

Excerpt 4:Piano introduction of the 2nd movement



The violin pronounces at this point in picking up a double-stopping in the same key and shifts to G anhemitonic pentatonic (measures 6-13) shifting the tonal centre from D anhemitonic to G anhemitonic pentatonic. The third movement of *Xylafrique* was scored for the full orchestra introducing Dagaaba traditional instruments such as *Nukpola*, *Kuor*, *Velkpele*, *Gangaar*, *Chiamé* and the *Gyil*. The *gyil*, like the French horn, transposes a 5th above and therefore plays G when all concert instruments are playing in C.

5.4 Meter and rhythm

Xylafrique is rooted in the *gyil* tradition as it uses simple and compound meters, a characteristic of *gyil* music. However, there were several twentieth century devices used in the compositional process such as metrical and dynamic modulation, but shifting from metre and tempo to another was uncommon. This corroborates what was originated by Carter (1950) and used in his *Eight Etudes and a Fantasy for Woodwind Quartet*.

Another device used was the hocket-technique. With this technique, the constituting notes of a tune, a rhythm otherwise a tone-pattern, or the constituting notes of a supporting ground-accompaniment, are played at the exactly appropriate point in time by those particular instruments that are included within their compass, or by those particular instruments that provide the required contrasts (Nketia 1962, p.44). Other techniques involved counterpoints and call-and-response.

¹ a locally alcoholic brewed drink

Furthermore, an adaptation of the Fibonacci sequence was also used from measures 47 to bar 53. A true Fibonacci sequence is a series of numbers that read 1,1,2,3,5,8,13,21,34,55,89.... etc. Each number, after the second, is the sum of the two previous numbers. This sequence was discovered by the Italian mathematician Leonardo Fibonacci (Kramer 1973, p.110).

Excerpt 5: A derivation of Leonardo Fibonacci sequence in *Xylafrique*



The excerpt above shows an adaptation of Fibonacci sequence used in *Xylafrique*. The series employed were multiples of 3 thus: 3,3,6,9 and 12 which is a derivation of the mathematical interpretation of Fibonacci. The 2nd movement makes use of the Fibonacci sequence from bar 24 to bar 36.

5.5 Treatment of Tonality

In the 1st movement of *Xylafrique*, is stated in G major pentatonic. It is accompanied by an ostinato bass also in G major pentatonic as quoted in excerpt 6 below.



Example 6: Statement of the theme with *gyl*

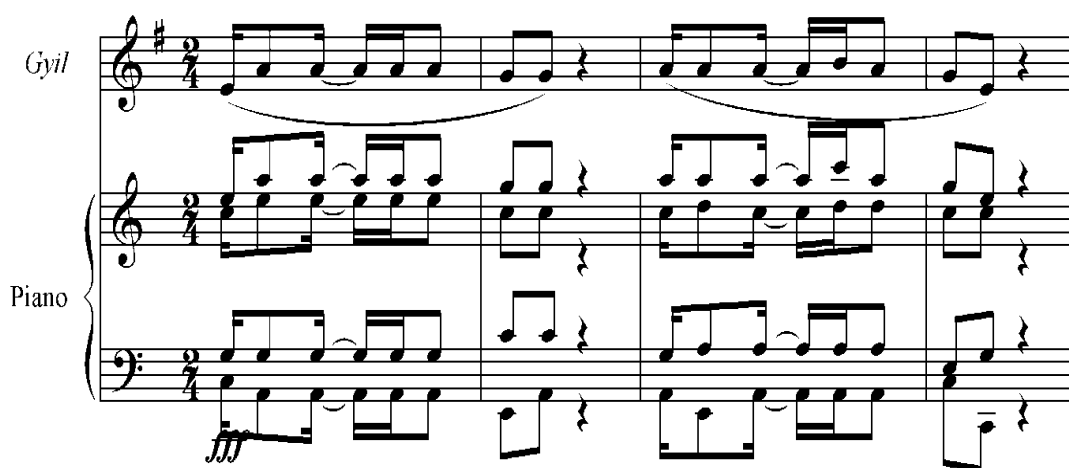
Shifting of modal centers is common. The piano enters in the same key G major pentatonic, while Violin (Vln.) and Cello (Vc.) play in the dominant, i.e., D major pentatonic (bar 5- 11). An attempt was made to create bitonality by juxtaposing the G on the D pentatonic modes used by Béla Bartók in his 'Songs of Harvest' form his 44 Violin Duets (1931) as illustrated in Excerpt 7 below.



Example7: Bitonality Concept

There are modulations from G pentatonic to D major pentatonic with a common chord modulation technique in (measures 12-23) but the *gyil* stays in the G major pentatonic. The Vln. and Vc. move from D major to G pentatonic (measures 22 – 27) and return to D major pentatonic in bar 31. Furthermore, all the instruments alternate between the two key centers of G pentatonic and D pentatonic in measures 46- 53, Section A1 bar 61-85, Section C measures 86-101 and Section A2 (bar 102-151 to end the movement).

In the third, it was based on the concept of bitonality. All the melodic instruments state the subject of the fugal exposition in D major but the *gyil* maintains its original key of G pentatonic in measures 90- 98. The alto instruments (Oboes and Violin II) answer in the dominant of D major pentatonic which is A pentatonic in measures 98-106). The tenor instruments (English Horn, B flat Clarinet and Viola) enter with the subject in D pentatonic (measures 106-114) and the basses instruments take over the answer in A pentatonic to end the fugal exposition (measures 114- 122). The excerpt 8 below illustrates this artistic phenomenon employed.



Excerpt 8: Usage of bitonality in the third movement

5.6 Melodic Contour, Range and Intervals

The three melodies move in steps, thirds, fourths, fifths and an octave; which is similar to the folk songs. The range for the three tunes is within the traditional performance. The Viola states a variation of the main theme (measures 5-12) and continues with the ostinato bass to bar 21 while the violin enters with a retrograde variation of the theme (measures 6-13). The main theme with retrograde variation and motivic developments runs through

the piece. The percussive nature of the piano allows it to alternate with *gyil* and *kour* drum patterns but the *velkpele* plays the original pattern and the retrograde from bar 2 to 46.

5.7 Harmony

The 1st movement was not based on the conventional Western harmonization for four parts; which is not a *Dagaaba gyil* musical feature. The folk songs harmony is only found in overlapping parts between the *gyil*, piano, violin and viola. There are some other Western harmonic techniques that were used to boost the *Dagaaba* musical idiom in the work e.g., quartal harmony—Harmonic formations were based on the interval of the fourth. Most often the perfect fourth has been the basic building block of such chords, and composers such as Paul Hindemith and Béla Bartók are well-known for their penchant for quartal harmonies. Another harmonic device used was the tertian harmony where chords construction in thirds as in triads. Excerpt 9 below shows tertian and chordal harmonic arrangements used in *Xylafrique*.

Example 9: Chordal arrangements for *Xylafrique*

6. Conclusion and implication

Compositions in African traditional medium usually deliver messages or sayings which are edifying, rather than the usual melodies, harmonies, timbres and rhythms found in Western musical tradition (Agawu 2003, p.5). The models used may assist art music composers to create traditional music that is functional in various cultural idioms. The merge results in a new entity, a hybrid which is ‘creativity’; a new musical creation of contemporary art songs.

The paper postulate that traditional composers have a guide to their activity and that each community has its own inherent music features which corroborate the observation by Herbst, Zaidel-Rudolph & Onyeji (2003): that one can compose using traditional African music elements alongside Western musical features. Indeed, this also supports the feeling about African musicians who have used traditional tunes to develop art music identified with their local idioms. This should be the reawakening of cultural ideals among Ghanaian art musicians.

This implies that traditional music features are valuable to create a new hybrid in the 21st century. Utilization of melodies, rhythms and textural elements of the borrowed music together with the Western music elements will give the composition shape in contemporary style. The result will be Creativity, a hybrid at the point of convergence between Culture and Information as seen in the diagram below.

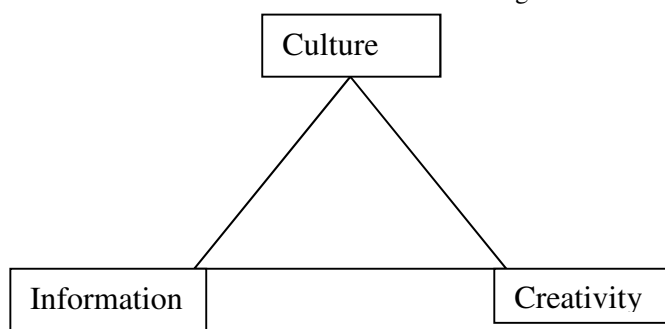


Figure 2: Creativity Model Culture is both a product and source of creation

Akuno (1991, p. 188), stating the matter differently says it is a result of relationships as well as an expression between man, the society and the environment. It is found in one’s total existence including relationships, perceptions and aspirations. It is important that Music students are exposed to traditional music composition for the exposure to traditional musical features of various cultures in Ghana, Africa and the across world. Through analysis and performance of such music, composition students and art music composers will experience pertinent concepts involved in creativity.

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Appendix – Some sections of the *Xylafrique* Score

XYLAFRIQUE

First Movement – (Measures 1-20)

∞ XYLAFRIQUE

The musical score is presented in two systems of staves. The first system includes Violin (Vln.), Viola (Vc.), Piano (Pno.), Guitar (Gyl), and Violoncello (Ve). The second system includes Violin (Vln.), Viola (Vc.), Piano (Pno.), Guitar (Gyl), and Violoncello (Ve). The score features various musical notations including dynamics (*mf*, *p*, *sfz*, *f*), articulation (*tr*, accents), and performance instructions (5, 9). The key signature is one sharp (F#) and the time signature is 4/4.

XYLAFRIQUE

13

Vln. *f*

Vc. *tr* *f*

Pno. *f*

Gyl *f*

Ve



Detailed description: This system contains measures 13 through 16. The Violin part (Vln.) features a melodic line with a forte (*f*) dynamic and trills (*tr*) in measures 14 and 16. The Violoncello part (Vc.) provides a bass line with trills (*tr*) in measures 14 and 16. The Piano part (Pno.) has a right-hand part with a triplet of eighth notes in measure 14, marked with a forte (*f*) dynamic, and a left-hand part with a single eighth note in measure 14. The Gyl (Guitar) part has a rhythmic pattern of eighth notes in the right hand and a bass line in the left hand, both marked with a forte (*f*) dynamic. The Ve (Drum) part has a steady eighth-note pattern.

17

Vln. *ff*

Vc. *tr* *ff*

Pno. *f*

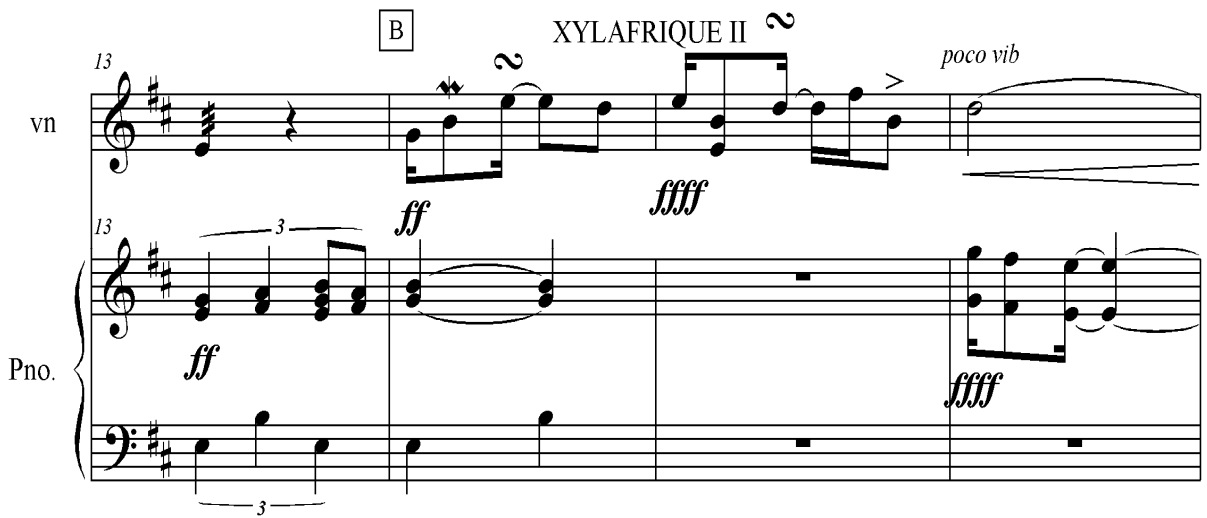
Gyl

Ve



Detailed description: This system contains measures 17 through 20. The Violin part (Vln.) features a melodic line with a fortissimo (*ff*) dynamic and accents (*acc*) in measures 18 and 19. The Violoncello part (Vc.) provides a bass line with trills (*tr*) in measures 18 and 20, and a fortissimo (*ff*) dynamic in measure 17. The Piano part (Pno.) has a right-hand part with a triplet of eighth notes in measure 18, marked with a forte (*f*) dynamic, and a left-hand part with a single eighth note in measure 18. The Gyl (Guitar) part has a rhythmic pattern of eighth notes in the right hand and a bass line in the left hand. The Ve (Drum) part has a steady eighth-note pattern.

B XYLAFRIQUE II *poco vib*



vn 13 *ff* *ffff*

Pno. 13 *ff* *ffff*

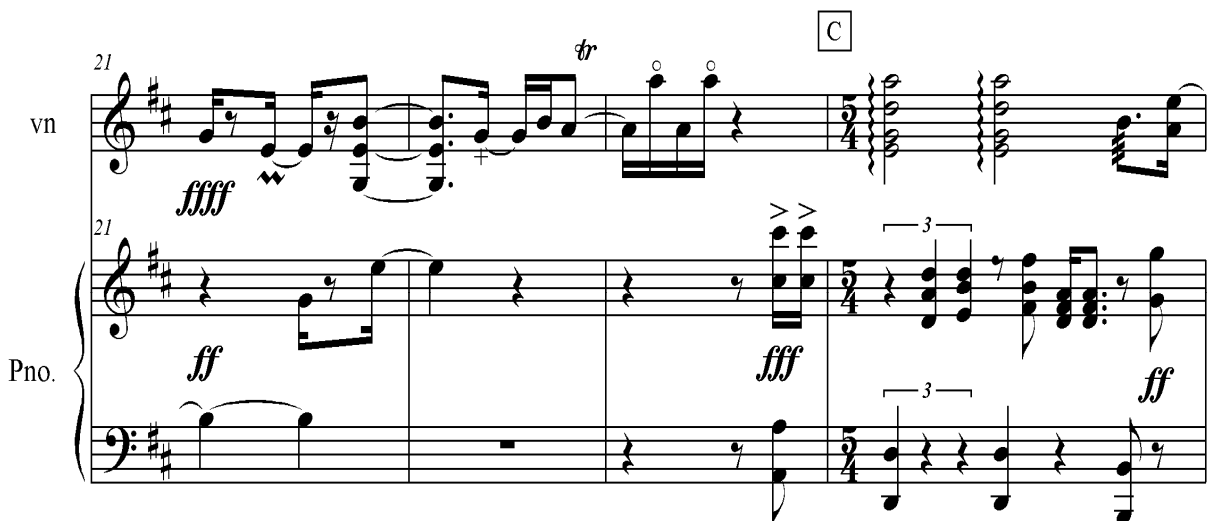
molto vib



vn 17 *ff*

Pno. 17 *ff* *mf* *ff* *p*

C



vn 21 *ffff*

Pno. 21 *ff* *ffff* *ff*

Third Movement – (Measures 1-16)



Piccolo

Flute 1

Flute 2

Oboe 1

Oboe 2

English Horn

Clarinet in B \flat 1

Clarinet in B \flat 2

Bass Clarinet

Bassoon 1

Bassoon 2

Contrabassoon

Nukpola

Kur

Velkpele

Chieme

Gyl

Piano

Violin I

Violin II

Viola

Cello

Contrabass

XYLAFRIQUE III



The image displays a page of a musical score for the piece "XYLAFRIQUE III", starting at measure 9. The score is arranged in a standard orchestral format with multiple staves. The instruments and parts shown are:

- Picc. (Piccolo)
- Fl. 1 (Flute 1)
- Fl. 2 (Flute 2)
- Ob. 1 (Oboe 1)
- Ob. 2 (Oboe 2)
- E. Hn. (English Horn)
- B. Cl. 1 (Bass Clarinet 1)
- B. Cl. 2 (Bass Clarinet 2)
- B. Cl. (Bass Clarinet)
- Bsn. 1 (Bassoon 1)
- Bsn. 2 (Bassoon 2)
- C. Bn. (Contrabassoon)
- Nuk. (Nagabamboo)
- Kr. (Krumpholtz)
- Vel. (Vibraphone)
- Ch. (Chimes)
- Gy. (Gyrfalcon)
- Pno. (Piano)
- Vln. I (Violin I)
- Vln. II (Violin II)
- Vla. (Viola)
- Vc. (Violoncello)
- Cb. (Cello)

The score includes various musical notations such as notes, rests, slurs, and dynamic markings like *mf* (mezzo-forte). The key signature is one sharp (F#), and the time signature is 4/4. The page number 149 is centered at the bottom.